

## Fastest USB hub available.

16 PORTS | THUNDERBOLT™ 3 | USB 3.2  
40GBPS | 2.4A (12W) PER PORT

MANAGED CHARGE & SYNC

RACKMOUNT & DESKTOP

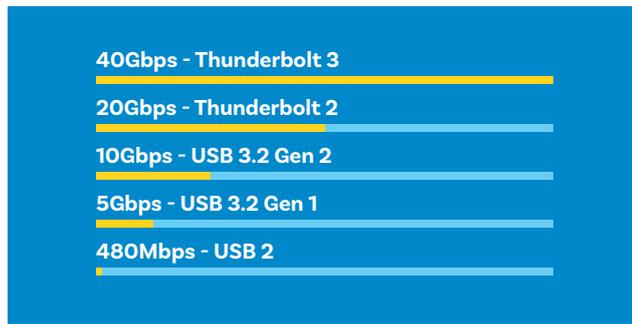


### The performance you need for scale

Built with dual Thunderbolt™ 3 connections and USB 3.2 ports, you've got the power you need with the ThunderSync3-16 managed USB hub. Designed to give you high-speed data transfer to devices and room to grow without being constrained by endpoint or bandwidth limits. For data transfer, the ThunderSync3-16 delivers the maximum rate possible. Connect USB 3.2 devices and each port will deliver 5Gbps. Connect USB 2 devices and each port will deliver the maximum 480Mbps to each port simultaneously.

### Less waiting, more doing

Using the fastest port available at 40Gbps ThunderSync3-16 is 16 times faster than using a USB 2 or USB 3.2 hub. Add another ThunderSync3-16 hub via the expansion port and you can achieve a 32x speed benefit vs USB 2 hubs.



### Guaranteed power. Consistent, unique performance

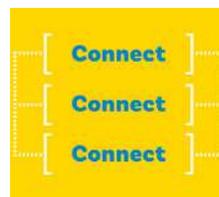
Our managed hubs are designed to provide a charge rate of up to 2.4A in sync mode, by utilising the CDP (Charging Downstream Port) functionality built into our hubs and some mobile devices (including Apple devices, Google Nexus 7 and 10 etc). A normal USB hub sync rate charge is just 500mA.

This is ideal if you need to leave devices connected to a host for sync and charge overnight, as it means they will charge whilst syncing and continue after the data transfer has completed, ensuring the device is fully charged when needed.



### Not all hubs are created equal.

Charge and transfer data at the same time with the managed USB hub that delivers high-speed charging and syncing. Or adjust settings to your own requirements.



### Scale to meet your needs.

Connect six hubs and up to 96 devices from one host computer without being affected by the endpoint limitation.



### Understand. Evaluate.

Three interfaces to manage and monitor what each device is doing exactly when and how you want to:

- LiveViewer
- API
- Command Line Instructions



### 24/7/365 charging reliability.

Charge and sync data continuously with this certified Thunderbolt™ 3 industrial managed USB hub.

16 x SuperSpeed USB 3.2 ports.



### Future proof.

Our intelligent charging algorithm can be updated to support new devices and charging protocols, ensuring your hub keeps up with market changes.

# Using the [ THUNDERSYNC3-16 ]

## Charging without connecting to a host computer

When the hub is switched on (and not connected to a local host computer) it is automatically configured to charge devices using its intelligent charging algorithm. Once the devices are connected, the algorithm will detect the highest charge rate allowable for each attached device.

Once our automatic profiling has completed, charging at the optimum rate specified by the manufacturer (up to 2.4 Amps) will begin, with the red LEDs being illuminated. Once the device is nearly fully charged and the current falls below a set limit for a given period of time, the green LEDs will be illuminated, indicating the device is charged.

### Charging Profiles

There are a number of profiles built into our hubs. We do not recommend that users change the profile settings in NVRAM (or by other means) unless they are required to offer a 'fixed profile' to their device in order to prevent the device misbehaving. Contact us for more information about changing the profile settings on our USB hubs.

1. 2.1A (Apple)
2. BC1.2 Standard (This covers the majority of Android phones and other devices)
3. Samsung
4. 2.1A (Apple and others with longer timeout)
5. 1.0A (Typically used by Apple)
6. 2.4A (Typically used by Apple)

## Using when connected to a host computer

When a local (host) computer is attached, the host can control the operation of each individual port using our software. Device charging and synchronisation can be monitored through our own LiveViewer App or Application Programming Interface (API) software or via Command Line Interface (CLI).

### Charging

When one of the Thunderbolt™ ports is connected to a Thunderbolt™ 2 or Thunderbolt™ 3 compliant port of a local computer, the TS3-16 defaults to Sync mode and charge currents are determined according to USB Implementers Forum (USB-IF) SuperSpeed USB3.2 specifications.

If the attached device complies with USB-IF Battery Charging specification BC1.2 and supports Charging Downstream Port (CDP), the TS3-16 can provide high-speed charging at 1.5A. If the connected device does not comply with BC1.2, the charge current will be limited to 500mA in compliance with USB specifications.

### Data Transfer

To transfer data, install applications, restore or update attached mobile devices, a data connection to a local host computer is required. The TS3-16 works independently to the Operating System (OS) and data transfer can be performed on all common operating systems, such as MacOS, Windows and Linux, with the software of your choice to transfer data or manage the devices.

In order to transfer data, connect the Thunderbolt™ port of your local (host) computer to one of the Thunderbolt™ ports on the back of the TS3-16 using a Thunderbolt™ 3 compliant cable. A Thunderbolt™ 2 cable can also be used with consequently reduced data speeds. Any devices connected to the TS3-16 will now appear as if they were connected to the host computer's USB port. The TS3-16 is fully compliant with SuperSpeed USB3.2 Gen 1 and can provide up to 5Gbps data transfer speeds per port. A yellow LED above each port will illuminate when Syncing.

## Specifications

<b>Input Voltage:</b>	100 ~ 250 Vac	<b>Ambient Operating Temperature Range:</b>	0 ~ 35°C
<b>Input Current:</b>	3.5A @ 115 VacA	<b>Relative humidity:</b>	5% to 95% non-condensing
<b>Input Frequency:</b>	47 ~ 63 Hz	<b>Dimensions (approx.):</b>	Fits 1U rack 482 long (430mm without ears) x 268 deep x 43 high mm
<b>Input Connection:</b>	C13	<b>Approximate weight:</b>	3.7 kg
<b>Output Voltage:</b>	5.2V	<b>Supplied with:</b>	Country appropriate mains cable.
<b>Output Current:</b>	2.4A Max per Port	<b>Accessories:</b>	Rackmount fitting kit, Thunderbolt cables
<b>Output Power:</b>	12W Max per Port		
<b>Output Power (Total):</b>	200W Maximum		
<b>Input/Output Connectors:</b>	16 x USB Type-A, 2 x Thunderbolt™ 3 Type-C		

## Certifications

- Independently safety tested by the Underwriters Laboratory (UL) under file #E346549
- CE Tested and marked
- CB Certificate
- FCC Part 15 Tested and marked
- RoHS Compliant
- China CCC certification
- Japanese PSE certification and Indian BIS (pending)
- Complies with the latest EN60950 safety requirements for ITE
- Housed within a UL94-V0 specification fire enclosure

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